

**AMENDMENTS IN THE CLAIMS:**

Please amend the claims as follows. Claims 1-8 are currently pending.

Claim 1 (Original): A light detection device comprising:  
an optical fiber, having an end face that serves as a light exiting surface; and  
a photoelectron emitting part, formed on the end face and emitting photoelectrons based  
on light exiting from the end face.

Claim 2 (Original): The light detection device according to Claim 1, wherein  
the optical fiber includes a core part,  
at least a part of the end face includes the core part, and  
the photoelectron emitting part is formed only on the core part of the end face.

Claim 3 (Currently Amended): The light detection device according to ~~Claim 1 or 2~~  
Claim 1, wherein a diffraction grating for wavelength selection is formed in the core part.

Claim 4 (Currently Amended): The light detection device according to ~~any of Claims 1~~  
~~through 3~~ Claim 1, further comprising a light shielding cladding, disposed on the surface of the  
optical fiber in order to prevent leakage of light from the optical fiber and intrusion of external  
light into the optical fiber.

Claim 5 (Currently Amended): The light detection device according to ~~any of Claims 1~~  
~~through 4~~ Claim 1, wherein the optical fiber includes another end face that serves as a light  
incidence surface and

the light detection device further comprises an optical fiber connector, which is mounted to the other end face.

Claim 6 (Currently Amended): The light detection device according to ~~any of Claims 1 through 5~~ Claim 1, further comprising a cooling part for lowering the temperature of the photoelectron emitting part.

Claim 7 (Currently Amended): The light detection device according to ~~any of Claims 1 through 6~~ Claim 1, wherein a metal layer is positioned between the end face and the photoelectron emitting part.

Claim 8 (New): The light detection device according to Claim 1, further comprising a light shielding cladding, disposed on the surface of the optical fiber in order to prevent leakage of light from the optical fiber.